

0022
RESULT 2

AAF21042

ID AAF21042 standard; DNA; 1376 BP.

XX

AC AAF21042;

XX

DT 14-MAR-2001 (first entry)

XX

DE Human low adenosine antisense oligonucleotide related sequence #2609.

XX

KW Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
KW human; airway disorder; bronchoconstriction; lung inflammation;
KW surfactant depletion; respiratory; bronchodilator; antiinflammatory;
KW immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic;
KW respiratory obstruction; pulmonary obstruction; impeded respiration;
KW surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
KW respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
KW pulmonary hypertension; emphysema; pulmonary transplantation rejection;
KW chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
KW cancer; ss.

XX

OS Homo sapiens.

XX

PN WO200062736-A2.

XX

PD 26-OCT-2000.

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PF 24-MAR-2000; 2000WO-US08020.

XX

PR 06-APR-1999; 99US-0127958.

XX

PA (UYEC-) UNIV EAST CAROLINA.

PA (NYCE/) NYCE J W.

XX

PI Nyce JW;

XX

DR WPI; 2000-679539/66.

XX

PT Low adenosine (A) content antisense oligonucleotides which do not
PT trigger adenosine receptors during metabolism, useful e.g. for treating
PT cancers and respiratory obstructions -

XX

PS Disclosure; Page 850; 1592pp; English.

XX

CC The present invention describes low adenosine (A) content antisense
CC oligonucleotides and compositions (I) comprising them. In the antisense
CC oligonucleotides the A is replaced by a 'Universal' or alternative base.
CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
CC immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.
CC The antisense oligonucleotides and (I) can be used to down-regulate the
CC expression and or activity of target polypeptides associated with
CC lung/respiratory disorders and malignancies, such as stimulating and
CC activating peptide factors and transmitters, transcription factors,
CC immunoglobulins and antibodies, antibody receptors, cytokines and
CC chemokines, endogenously produced specific and non-specific enzymes,
CC binding proteins, adhesion molecules and their receptors, cytokine and
CC chemokine receptors, adenosine receptors, bradykinin receptors, central

CC nervous system (CNS) and peripheral nervous and non-nervous system
 CC receptors, CNS and peripheral nervous and non-nervous system peptide
 CC transmitters, defensins, growth factors, vasoactive peptides and
 CC receptors, binding proteins and malignancy associated proteins. The
 CC antisense oligonucleotides may be used in this way to treat disorders
 CC including respiratory obstruction (especially pulmonary obstruction
 CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies)
 CC and/or surfactant hypoproduction which are associated with a disease or
 CC condition selected from pulmonary vasoconstriction, inflammation,
 CC allergies, asthma, impeded respiration, respiratory distress syndrome
 CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
 CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
 CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
 CC fragments and antisense oligonucleotides used in the exemplification of
 CC the present invention.

XX

SQ Sequence 1376 BP; 138 A; 526 C; 484 G; 228 T; 0 other;

Query Match 24.7%; Score 967; DB 21; Length 1376;
 Best Local Similarity 97.0%; Pred. No. 1.8e-155;
 Matches 985; Conservative 0; Mismatches 30; Indels 0; Gaps 0;

Qy	2051	ccagcaccctg	cgccctgacatgagcccttg	cgggcccctcaacctgagcctggcgggc	2110
Db	54	ccggcaccctg	cgccctgacatgagcccttg	cgggcccctcaacctgagcctggcgggc	113
Qy	2111	gaggcgaccacatg	cgcgccctgggtccccaacacg	tcggccgtgccgccgtcgggc	2170
Db	114	gaggcgaccacatg	cgcgccctgggtccccaacacg	tcggccgtgccgccgtcgggc	173
Qy	2171	gcttcgcccgcgtg	cccatcttctccatgacgctggg	cgccgtgtccaacctgctggcg	2230
Db	174	gcttcgcccgcgtg	cccatcttctccatgacgctggg	cgccgtgtccaacctgctggcg	233
Qy	2231	ctggcgctgctgg	cgccaggccgcgggcccgcctg	cgacgcgcgcgctcgggccaccaccttc	2290
Db	234	ctggcgctgctgg	cgccaggccgcgggcccgcctg	cgacgcgcgcgctcgggccaccaccttc	293
Qy	2291	ctgctgttcgtgg	ccagcctgctggccaccgacctg	ggcgggccacgtgatcccggg	2350
Db	294	ctgctgttcgtgg	ccagcctgctggccaccgacctg	ggcgggccacgtgatcccggg	353
Qy	2351	ctggtgctgcgt	ctgtacactgcggggcgcgctc	cgccggcggggcctgccacttctg	2410
Db	354	ctggtgctgcgt	ctgtacactgcggggcgcgctc	cgccggcggggcctgccacttctg	413
Qy	2411	ggcggtgcatggt	cttcttcggcctgtgcccgctg	ctgctgggctgtggcatggccgtg	2470
Db	414	ggcggtgcatggt	cttcttcggcctgtgcccgctg	ctgctgggctgtggcatggccgtg	473
Qy	2471	gagcgctgcgtgg	gcgtcacgcggccgctgctccac	gcgcgcgggtctcggtcgccgc	2530
Db	474	gagcgctgcgtgg	gcgtcacgcggccgctgctccac	gcgcgcgggtctcggtcgccgc	533
Qy	2531	gcgcgcctggc	gctggccgcggtggccgcggtg	gccttgccgctggcgctgctgccgctg	2590

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Db    534 ggcgcgcctggcgctggccgcggtggccgcggtggccttggccgtggcgctgctgccgctg 593
Qy    2591 ggcgcgcgtggggccgctatgagctgcagtagccggggcacgtgggtgcttcacggcctgggt 2650
      |||
Db    594 ggcgcgcgtggggccgctatgagctgcagtagccggggcacgtgggtgcttcacggcctgggt 653
Qy    2651 cccccggggcggtggcgccaggcactgcttgctggcctcttcgccagcctcggcctgggtc 2710
      |||
Db    654 cccccggggcggtggcgccaggcactgcttgctggcctcttcgccagcctcggcctgggtc 713
Qy    2711 gcgctcctcgccgcgctggtgtgcaacacgctcagcggcctggccctgctacgcgcccgc 2770
      |||
Db    714 gcgctcctcgccgcgctggtgtgcaacacgctcagcggcctggccctgcatcgcgcccgc 773
Qy    2771 tggcgacgcgcgtcccgacggcctccccgggcctcaggccccgacagccggcgctcgctgg 2830
      |||
Db    774 tggcgacgcgcgtcccgacggcctccccgggcctcaggccccgacagccggcgctcgctgg 833
Qy    2831 gggggcgacggacccccgctcggcctcgcctcgtccgcctcgtccatcgcttcggcctcc 2890
      |||
Db    834 gggggcgacggacccccgctcggcctcgcctcgtccgcctcgtccatcgcttcggcctcc 893
Qy    2891 accttctttggcggtctctcgagcagcggctcggcacgcagagctcgcgcccacgacgtg 2950
      |||
Db    894 accttctttggcggtctctcgagcagcggctcggcacgcagagctcgcgcccacgacgtg 953
Qy    2951 gagatggtggggccagcttgctcggtatcatggtggtgctgcatctgctggagcccaatg 3010
      |||
Db    954 gagatggtggggccagcttgctcggtatcatggtggtgctgcatctgctggagcccaatg 1013
Qy    3011 ctggtgagggggcgacccggccctcgagccacgctccttcccgcctcctctcggc 3065
      ||||| || || || |||| | | | | | ||| ||||
Db    1014 ctggtggtggtggcgctggccgctcggcggtgagctctacctccctgcagcggc 1068

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RESULT 3

AAA34920

ID AAA34920 standard; DNA; 1376 BP.

XX

AC AAA34920;

XX

DT 28-JUL-2000 (first entry)

XX

DE Human adenosine receptor related polynucleotide SEQ ID NO:2609.

XX

KW Human; adenosine receptor; low adenosine antisense oligonucleotide;
KW phosphorothioate; impaired respiration; inflammation; allergy;
KW allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
KW antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway;
KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;
KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.

XX

OS Homo sapiens.

XX

PN WO200009525-A2.
 XX
 PD 24-FEB-2000.
 XX
 PF 03-AUG-1999; 99WO-US17712.
 XX
 PR 03-AUG-1998; 98US-0095212.
 XX
 PA (UYEC-) UNIV EAST CAROLINA.
 XX
 PI Nyce JW;
 XX
 DR WPI; 2000-205971/18.
 XX
 PT New antisense oligonucleotides useful for treating e.g. pulmonary
 PT vasoconstriction, inflammation, allergies, asthma, hypertension,
 PT bronchitis, emphysema, respiratory distress syndrome, ischemia or
 PT cancers -
 XX
 PS Disclosure; Page 779; 1343pp; English.
 XX
 CC The present invention describes a new composition comprising an
 CC antisense oligonucleotide (ON) with low adenosine (up to 15%), which
 CC targets nucleic acids involved in bronchoconstriction, allergies, and/or
 CC inflammation. The ON can have antiinflammatory, antiallergic,
 CC antiasthmatic, cytostatic and analgesic activities. The compositions are
 CC useful for the treatment of diseases associated with inflammation,
 CC impaired airways, including lung disease and diseases whose secondary
 CC effects afflict the lungs of a subject. They can be used for treating
 CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies,
 CC asthma, impeded respiration, respiratory distress syndrome, pain, cystic
 CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive
 CC pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,
 CC carcinomas, and cancers which may metastasise to the lungs, including
 CC breast and prostate cancer. The reduction of the adenosine content of
 CC the ONs reduces side effects. The A-containing ONs break down with the
 CC release of deoxyadenosine which activates adenosine receptors causing
 CC bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the
 CC nucleotide sequences given in the sequence listing from the present
 CC invention, which correspond to SEQ ID NO:1 to 2815, and then the last
 CC 185 sequences are also called SEQ ID NO:1 to 185, but the sequences
 CC differ from the previously named sequences. SEQ ID NO:11 to 1680
 CC (AAA32323 to AAA33992) are specifically claimed ONs from the present
 CC invention. N.B. Sequences given in the disclosure of the present
 CC invention do not match up with their corresponding SEQ ID NO: sequences
 CC given in the sequence listing.
 XX
 SQ Sequence 1376 BP; 138 A; 526 C; 484 G; 228 T; 0 other;

Query Match 24.7%; Score 967; DB 21; Length 1376;
 Best Local Similarity 97.0%; Pred. No. 1.8e-155;
 Matches 985; Conservative 0; Mismatches 30; Indels 0; Gaps 0;

Qy 2051 ccagcacccttgccgcctgacatgagcccttgccgggccctcaacctgagcctggcgggc 2110
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 Db 54 ccggcacccttgccgcctgacatgagcccttgccgggccctcaacctgagcctggcgggc 113

Qy	2111	gaggcgaccacatgcgcgggcgccctgggtccccaacacgtcggccggtgccgccgtcgggc	2170
Db	114	gaggcgaccacatgcgcgggcgccctgggtccccaacacgtcggccggtgccgccgtcgggc	173
Qy	2171	gcttcgcccgcgctgcccatcttctccatgacgctggggcgccgtgtccaacctgctggcg	2230
Db	174	gcttcgcccgcgctgcccatcttctccatgacgctggggcgccgtgtccaacctgctggcg	233
Qy	2231	ctggcgctgctggcgaggccgcgggccgcctgcgacgcgcgctcgcccgccaccttc	2290
Db	234	ctggcgctgctggcgaggccgcgggccgcctgcgacgcgcgctcgcccgccaccttc	293
Qy	2291	ctgctgttcgtggccagcctgctggccaccgacctggcgggccacgtgatcccgggcgcg	2350
Db	294	ctgctgttcgtggccagcctgctggccaccgacctggcgggccacgtgatcccgggcgcg	353
Qy	2351	ctggtgctgcgtctgtacactgcgggcgcgctccggccggcggggctgccacttctg	2410
Db	354	ctggtgctgcgtctgtacactgcgggcgcgctccggccggcggggctgccacttctg	413
Qy	2411	ggcggctgcatggtcttcttcggcctgtgccgctgctgctgggctgtggcatggccgtg	2470
Db	414	ggcggctgcatggtcttcttcggcctgtgccgctgctgctgggctgtggcatggccgtg	473
Qy	2471	gagcgctgcgtgggcgctcacgcggccgctgctccacgcgcgcggtctcggtcgccgc	2530
Db	474	gagcgctgcgtgggcgctcacgcggccgctgctccacgcgcgcggtctcggtcgccgc	533
Qy	2531	gcgcgcctggcgctggccgcggtggccgcggtggccttggccgtggcgctgctgcgcgtg	2590
Db	534	gcgcgcctggcgctggccgcggtggccgcggtggccttggccgtggcgctgctgcgcgtg	593
Qy	2591	gcgcgcgtgggcccgtatgagctgcagtaccggggcacgtggtgcttcatcggcctgggt	2650
Db	594	gcgcgcgtgggcccgtatgagctgcagtaccggggcacgtggtgcttcatcggcctgggt	653
Qy	2651	ccccggggcggtggcgccaggcactgcttgcctcttcgccagcctcggcctggtc	2710
Db	654	ccccggggcggtggcgccaggcactgcttgcctcttcgccagcctcggcctggtc	713
Qy	2711	gcgctcctcgccgcgctggtgtgcaacacgctcagcggcctggccctgctacgcgcccgc	2770
Db	714	gcgctcctcgccgcgctggtgtgcaacacgctcagcggcctggccctgctacgcgcccgc	773
Qy	2771	tggcgacgcgctcccgacggcctccccggcctcaggccccgacagccggcgctcgctgg	2830
Db	774	tggcgacgcgctcccgacggcctccccggcctcaggccccgacagccggcgctcgctgg	833
Qy	2831	ggggcgacggaccccgcctcggcctccgcctcgccgctcgccatcgcttcggcctcc	2890
Db	834	ggggcgacggaccccgcctcggcctccgcctcgccgctcgccatcgcttcggcctcc	893
Qy	2891	accttctttggcggtctcggagcagcggtcggcacgcagagctcgcgcccacgacgtg	2950
Db	894	accttctttggcggtctcggagcagcggtcggcacgcagagctcgcgcccacgacgtg	953

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Qy 2951 gagatggtgggccagcttgctcggtatcatggtggtgctgctgcatctgctggagcccaatg 3010
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Db 954 gagatggtgggccagcttgctcggtatcatggtggtgctgctgcatctgctggagcccaatg 1013

Qy 3011 ctggtgagggggcgacccggccctcgagccacgctccttcccgctccctctcggc 3065
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Db 1014 ctggtggttggtggcgctggccgctcgggcggtggagctctacctccctgcagcggc 1068

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AAO80287

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Query Match 24.7%; Score 967; DB 16; Length 1394;
Best Local Similarity 97.0%; Pred. No. 1.8e-155;
Matches 985; Conservative 0; Mismatches 30; Indels 0; Gaps 0;

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Qy 2051 ccagcaccctggcgccctgacatgagcccttgcgggccctcaacctgagcctggcgggc 2110
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Db 54 ccggcaccctggcgccctgacatgagcccttgcgggccctcaacctgagcctggcgggc 113

Qy 2111 gaggcgaccacatgcgcgggcgccctgggtccccaacacgtcgccgtgcgcgcgtcgggc 2170
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Db 114 gaggcgaccacatgcgcgggcgccctgggtccccaacacgtcgccgtgcgcgcgtcgggc 173

Qy 2171 gcttcgcccgcgtgcccattcttctccatgacgtggcgccgtgtccaacctgctggcg 2230
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Db 174 gcttcgcccgcgtgcccattcttctccatgacgtggcgccgtgtccaacctgctggcg 233

Qy 2231 ctggcgctgctggcgagggcgggcgccctgcgacgcccgctcgcccgccaccttc 2290
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Db 234 ctggcgctgctggcgagggcgggcgccctgcgacgcccgctcgcccgccaccttc 293

Qy 2291 ctgctgttcgtggccagcctgctggccaccgacctggcgggccacgtgatcccgggcgcg 2350
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Db 294 ctgctgttcgtggccagcctgctggccaccgacctggcgggccacgtgatcccgggcgcg 353

Qy 2351 ctggtgctgcgtctgtacactgcggggcgcgctccggccggcgggcgccctgccacttctg 2410
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Db 354 ctggtgctgcgtctgtacactgcggggcgcgctccggccggcgggcgccctgccacttctg 413

Qy 2411 ggcggtgcatggtcttcttcggcctgtgcccgctgctgctgggctgtggcatggccgtg 2470
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Db 414 ggcggtgcatggtcttcttcggcctgtgcccgctgctgctgggctgtggcatggccgtg 473

Qy 2471 gagcgctgcgtgggcgctcacgcggccgctgctccacgcgcgcgggtctcggtcgccgc 2530
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Db 474 gagcgctgcgtgggcgctcacgcggccgctgctccacgcgcgcgggtctcggtcgccgc 533

Qy 2531 gcgcgcctggcgctggcgcggtggccgcggtggccttggccgtggcgctgctgccgtg 2590
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Db 534 gcgcgcctggcgctggcgcggtggccgcggtggccttggccgtggcgctgctgccgtg 593

Qy 2591 gcgcgcgtgggcccgtatgagctgcagtaccggggcacgtggtgcttcatcggcctgggt 2650
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Qy 2651 ccccgggcggtggcgccaggcactgcttgccttcttcgccagcctcggcctggtc 2710
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Qy 2711 gcgctcctcgccgcgtggtgtgcaacacgtcagcggcctggccctgctacgcgcccgc 2770
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Db 714 gcgctcctcgccgcgtggtgtgcaacacgtcagcggcctggccctgctacgcgcccgc 773

Qy 2771 tggcgacgccgtcccgacggcctccccggcctcaggccccgacagccggcgctcgctgg 2830
    |||||
Db 774 tggcgacgccgtcccgacggcctccccggcctcaggccccgacagccggcgctcgctgg 833
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Qy 2831 gggg'gcgcacg'gacccccgctcggcctccgcctcgtccgcctcgtccatcgcttcggcctcc 2890
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Db 834 gggg'gcgcacg'gacccccgctcggcctccgcctcgtccgcctcgtccatcgcttcggcctcc 893

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Db 894 accttcctttggcggctctcggagcagcggctcggcacgcagagctcgcgccacgacgtg 953

Qy 2951 gagatggtgggcccagcttgctcggtatcatggtggtgctgcatctgctggagcccaatg 3010
    |||||
Db 954 gagatggtgggcccagcttgctcggtatcatggtggtgctgcatctgctggagcccaatg 1013

Qy 3011 ctggtgagggg'gcgacccggccctcgagccacgctccttcccgctccctctcggc 3065
    |||||  ||  ||  ||  ||||  ||  ||  ||  ||  ||  ||  ||  ||  ||  ||  ||  ||
Db 1014 ctggtggttggtggcgctggccgctcggcggctggagctctacctccctgcagcggc 1068

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RESULT 5

AAF21047

ID AAF21047 standard; DNA; 9060 BP.

XX

AC AAF21047;

XX

DT 14-MAR-2001 (first entry)

XX

DE Human low adenosine antisense oligonucleotide related sequence #2614.

XX

KW Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
KW human; airway disorder; bronchoconstriction; lung inflammation;
KW surfactant depletion; respiratory; bronchodilator; antiinflammatory;
KW immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic;
KW respiratory obstruction; pulmonary obstruction; impeded respiration;
KW surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
KW respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
KW pulmonary hypertension; emphysema; pulmonary transplantation rejection;
KW chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
KW cancer; ss.

XX

OS Homo sapiens.

XX

PN WO200062736-A2.

XX

PD 26-OCT-2000.

XX

PF 24-MAR-2000; 2000WO-US08020.

XX

PR 06-APR-1999; 99US-0127958.

XX

PA (UYEC-) UNIV EAST CAROLINA.

PA (NYCE/) NYCE J W.

XX

PI Nyce JW;

XX

DR WPI; 2000-679539/66.

XX

PT Low adenosine (A) content antisense oligonucleotides which do not

PT trigger adenosine receptors during metabolism, useful e.g. for treating
PT cancers and respiratory obstructions -

XX

PS Disclosure; Page 852-854; 1592pp; English.

XX

CC The present invention describes low adenosine (A) content antisense
CC oligonucleotides and compositions (I) comprising them. In the antisense
CC oligonucleotides the A is replaced by a 'Universal' or alternative base.
CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
CC immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.
CC The antisense oligonucleotides and (I) can be used to down-regulate the
CC expression and or activity of target polypeptides associated with
CC lung/respiratory disorders and malignancies, such as stimulating and
CC activating peptide factors and transmitters, transcription factors,
CC immunoglobulins and antibodies, antibody receptors, cytokines and
CC chemokines, endogenously produced specific and non-specific enzymes,
CC binding proteins, adhesion molecules and their receptors, cytokine and
CC chemokine receptors, adenosine receptors, bradykinin receptors, central
CC nervous system (CNS) and peripheral nervous and non-nervous system
CC receptors, CNS and peripheral nervous and non-nervous system peptide
CC transmitters, defensins, growth factors, vasoactive peptides and
CC receptors, binding proteins and malignancy associated proteins. The
CC antisense oligonucleotides may be used in this way to treat disorders
CC including respiratory obstruction (especially pulmonary obstruction
CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies)
CC and/or surfactant hypoproduction which are associated with a disease or
CC condition selected from pulmonary vasoconstriction, inflammation,
CC allergies, asthma, impeded respiration, respiratory distress syndrome
CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
CC fragments and antisense oligonucleotides used in the exemplification of
CC the present invention.

XX

SQ Sequence 9060 BP; 1812 A; 2734 C; 2459 G; 2055 T; 0 other;

Query Match 24.7%; Score 967; DB 21; Length 9060;
Best Local Similarity 97.0%; Pred. No. 1.9e-155;
Matches 985; Conservative 0; Mismatches 30; Indels 0; Gaps 0;

Qy 2051 ccagcaccctggcgccctgacatgagcccttgcgggcccctcaacctgagcctggcgggc 2110
|| |||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 2426 ccggcaccctggcgccctgacatgagcccttgcgggcccctcaacctgagcctggcgggc 2485

Qy 2111 gaggcgaccacatgcgcgggcgccctgggtccccaacacgctcggccgtgccgccgtcgggc 2170
|||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 2486 gaggcgaccacatgcgcgggcgccctgggtccccaacacgctcggccgtgccgccgtcgggc 2545

Qy 2171 gcttcgcccgcgctgcccattcttctccatgacgctgggcgccgtgtccaacctgctggcg 2230
|||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 2546 gcttcgcccgcgctgcccattcttctccatgacgctgggcgccgtgtccaacctgctggcg 2605

Qy 2231 ctggcgctgctggcgaggcgcgggcgccctgacgacgcccgcgctcgggccgccaccttc 2290
|||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 2606 ctggcgctgctggcgaggcgcgggcgccctgacgacgcccgcgctcgggccgccaccttc 2665

Qy	2291	ctgctgttcgtggccagcctgctggccaccgacctggcgggccacgtgatcccgggcgcg	2350
Db	2666	ctgctgttcgtggccagcctgctggccaccgacctggcgggccacgtgatcccgggcgcg	2725
Qy	2351	ctggtgctgctgtgtacactgcggggcgcgctccggccggcggggacctgccacttcctg	2410
Db	2726	ctggtgctgctgtgtacactgcggggcgcgctccggccggcggggacctgccacttcctg	2785
Qy	2411	ggcggtgcatggtcttcttcggcctgtgcccgtgctgctgggctgtggcatggccgtg	2470
Db	2786	ggcggtgcatggtcttcttcggcctgtgcccgtgctgctgggctgtggcatggccgtg	2845
Qy	2471	gagcgctgctggggcggtcacgcggccgctgctccacgcgcggggtctcggtcgccgc	2530
Db	2846	gagcgctgctggggcggtcacgcggccgctgctccacgcgcggggtctcggtcgccgc	2905
Qy	2531	gcgcgcctggcgctggccgcggtggccgcggtggccttggcgtggcgctgctgccgctg	2590
Db	2906	gcgcgcctggcgctggccgcggtggccgcggtggccttggcgtggcgctgctgccgctg	2965
Qy	2591	gcgcgcgtgggcccgtatgagctgcagtaccgggacagtggtgcttcacggcctgggt	2650
Db	2966	gcgcgcgtgggcccgtatgagctgcagtaccgggacagtggtgcttcacggcctgggt	3025
Qy	2651	ccccggggcggtggcgccaggcactgcttgcctcttcgccagcctcggcctggtc	2710
Db	3026	ccccggggcggtggcgccaggcactgcttgcctcttcgccagcctcggcctggtc	3085
Qy	2711	gcgctcctcgccgcgctggtgtgcaacacgctcagcggcctggccctgctacgcgccgc	2770
Db	3086	gcgctcctcgccgcgctggtgtgcaacacgctcagcggcctggccctgcatcgccgcgc	3145
Qy	2771	tggcgacgcgctcccgacggcctccccggcctcaggccccgacagccggcgctcgctgg	2830
Db	3146	tggcgacgcgctcccgacggcctccccggcctcaggccccgacagccggcgctcgctgg	3205
Qy	2831	ggggcgacaggaccccgctcggcctccgctcgtccgcctcgccatcgcttcggcctcc	2890
Db	3206	ggggcgacaggaccccgctcggcctccgctcgtccgcctcgccatcgcttcggcctcc	3265
Qy	2891	accttctttggcggtctctcgagcagcggtcggcacgcagagctcgcgccacgacgtg	2950
Db	3266	accttctttggcggtctctcgagcagcggtcggcacgcagagctcgcgccacgacgtg	3325
Qy	2951	gagatggtgggcccagcttgtcggtatcatggtggtgctgcatctgctggagcccaatg	3010
Db	3326	gagatggtgggcccagcttgtcggtatcatggtggtgctgcatctgctggagcccaatg	3385
Qy	3011	ctggtgagggggcgaccggccctcgagccacgctccttcccgtccctctcggc	3065
Db	3386	ctggtggtggggcgctggccgtcggcggctggagctctacctccctgcagcggc	3440

RESULT 6

AAA34925

ID AAA34925 standard; DNA; 9060 BP.

XX
 AC AAA34925;
 XX
 DT 28-JUL-2000 (first entry)
 XX
 DE Human adenosine receptor related polynucleotide SEQ ID NO:2614.
 XX
 KW Human; adenosine receptor; low adenosine antisense oligonucleotide;
 KW phosphorothioate; impaired respiration; inflammation; allergy;
 KW allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
 KW antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway;
 KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
 KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;
 KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
 KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200009525-A2.
 XX
 PD 24-FEB-2000.
 XX
 PF 03-AUG-1999; 99WO-US17712.
 XX
 PR 03-AUG-1998; 98US-0095212.
 XX
 PA (UYEC-) UNIV EAST CAROLINA.
 XX
 PI Nyce JW;
 XX
 DR WPI; 2000-205971/18.
 XX
 PT New antisense oligonucleotides useful for treating e.g. pulmonary
 PT vasoconstriction, inflammation, allergies, asthma, hypertension,
 PT bronchitis, emphysema, respiratory distress syndrome, ischemia or
 PT cancers -
 XX
 PS Disclosure; Page 781-783; 1343pp; English.
 XX
 CC The present invention describes a new composition comprising an
 CC antisense oligonucleotide (ON) with low adenosine (up to 15%), which
 CC targets nucleic acids involved in bronchoconstriction, allergies, and/or
 CC inflammation. The ON can have antiinflammatory, antiallergic,
 CC antiasthmatic, cytostatic and analgesic activities. The compositions are
 CC useful for the treatment of diseases associated with inflammation,
 CC impaired airways, including lung disease and diseases whose secondary
 CC effects afflict the lungs of a subject. They can be used for treating
 CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies,
 CC asthma, impeded respiration, respiratory distress syndrome, pain, cystic
 CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive
 CC pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,
 CC carcinomas, and cancers which may metastasise to the lungs, including
 CC breast and prostate cancer. The reduction of the adenosine content of
 CC the ONs reduces side effects. The A-containing ONs break down with the
 CC release of deoxyadenosine which activates adenosine receptors causing
 CC bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the
 CC nucleotide sequences given in the sequence listing from the present

CC invention, which correspond to SEQ ID NO:1 to 2815, and then the last
CC 185 sequences are also called SEQ ID NO:1 to 185, but the sequences
CC differ from the previously named sequences. SEQ ID NO:11 to 1680
CC (AAA32323 to AAA33992) are specifically claimed ONs from the present
CC invention. N.B. Sequences given in the disclosure of the present
CC invention do not match up with their corresponding SEQ ID NO: sequences
CC given in the sequence listing.

XX

SQ Sequence 9060 BP; 1812 A; 2735 C; 2459 G; 2054 T; 0 other;

Query Match 24.7%; Score 967; DB 21; Length 9060;
Best Local Similarity 97.0%; Pred. No. 1.9e-155;
Matches 985; Conservative 0; Mismatches 30; Indels 0; Gaps 0;

Qy 2051 ccagcaccctggcgccctgacatgagcccttgcgggccctcaacctgagcctggcgggc 2110
|| |||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 2426 ccggcaccctggcgccctgacatgagcccttgcgggccctcaacctgagcctggcgggc 2485

Qy 2111 gagcgaccacatgcgcgggcgccctgggtccccaacacgtcgcccggtgccgcccgtcgggc 2170
|||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 2486 gagcgaccacatgcgcgggcgccctgggtccccaacacgtcgcccggtgccgcccgtcgggc 2545

Qy 2171 gcttcgcccgcgctgcccattcttctccatgacgctggcgccggtgtccaacctgctggcg 2230
|||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 2546 gcttcgcccgcgctgcccattcttctccatgacgctggcgccggtgtccaacctgctggcg 2605

Qy 2231 ctggcgctgctggcgccaggccgcgggcccgcctgcgacgcccgcgctcgcccgccaccttc 2290
|||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 2606 ctggcgctgctggcgccaggccgcgggcccgcctgcgacgcccgcgctcgcccgccaccttc 2665

Qy 2291 ctgctgttcgtggccagcctgctggccaccgacctggcgggccacgtgatcccgggcgcg 2350
|||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 2666 ctgctgttcgtggccagcctgctggccaccgacctggcgggccacgtgatcccgggcgcg 2725

Qy 2351 ctggtgctgctgtgtacactgccccggcgcgctccggccggcggggctgccacttctcg 2410
|||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 2726 ctggtgctgctgtgtacactgccccggcgcgctccggccggcggggctgccacttctcg 2785

Qy 2411 ggcggtgcatggtcttcttcggcctgtgcccgctgctgctgggctgtggcatggccgtg 2470
|||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 2786 ggcggtgcatggtcttcttcggcctgtgcccgctgctgctgggctgtggcatggccgtg 2845

Qy 2471 gagcgctgctggcggtcacgcggccgctgctccacgcccgcggggtctcggtcgccgc 2530
|||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 2846 gagcgctgctggcggtcacgcggccgctgctccacgcccgcggggtctcggtcgccgc 2905

Qy 2531 gcgcgcctggcgctggccgcgggtggccgcgggtggccttggccgtggcgctgctgccgtg 2590
|||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 2906 gcgcgcctggcgctggccgcgggtggccgcgggtggccttggccgtggcgctgctgccgtg 2965

Qy 2591 gcgcgcgtgggcccgtatgagctgcagtaccggggcacgtggtgcttcacggcctgggt 2650
|||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 2966 gcgcgcgtgggcccgtatgagctgcagtaccggggcacgtggtgcttcacggcctgggt 3025

Qy 2651 ccccgggcggtggcgccaggcactgcttgccttctcgccagcctcggcctggtc 2710
|||||||||||||||||||||||||||||||||||||||||||||||||||||||

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Db      3026 cccccgggcggtggcgccaggcactgcttgctggcctcttcgccagcctcggcctggtc 3085
Qy      2711 gcgctcctcgccgcgctggtgtgcaacacgctcagcggcctggccctgctacgcgcccgc 2770
        |||||||||||||||||||||||||||||||||||||||||||||||||||
Db      3086 gcgctcctcgccgcgctggtgtgcaacacgctcagcggcctggccctgcatcgcgcccgc 3145
Qy      2771 tggcgacgcgcgtcccgacggcctccccggcctcaggccccgacagccggcgctcgctgg 2830
        |||||||||||||||||||||||||||||||||||||||||||||||||||
Db      3146 tggcgacgcgcgtcccgacggcctccccggcctcaggccccgacagccggcgctcgctgg 3205
Qy      2831 ggggcgcacggacccccgctcggcctcgcctcgctccgctcgctccatcgcttcggcctcc 2890
        |||||||||||||||||||||||||||||||||||||||||||||||||||
Db      3206 ggggcgcacggacccccgctcggcctcgcctcgctccgctcgctccatcgcttcggcctcc 3265
Qy      2891 accttctttggcggtctctcggagcagcggctcggcacgcagagctcgcgcccacgacgtg 2950
        |||||||||||||||||||||||||||||||||||||||||||||||||||
Db      3266 accttctttggcggtctctcggagcagcggctcggcacgcagagctcgcgcccacgacgtg 3325
Qy      2951 gagatggtgggccagcttgctcggatcatggtggtgtcgtgcatctgctggagcccaatg 3010
        |||||||||||||||||||||||||||||||||||||||||||||||||||
Db      3326 gagatggtgggccagcttgctcggatcatggtggtgtcgtgcatctgctggagcccaatg 3385
Qy      3011 ctggtgagggggcgacccggccccctcgagccacgctccttcccgctccctctcggc 3065
        |||||  ||  ||  ||||  ||  ||  ||  ||  ||  ||  ||  ||
Db      3386 ctggtgttggtggcgctggcgtcggcggtggagctctacctccctgcagcggc 3440

```

RESULT 7

AAZ93894

ID AAZ93894 standard; DNA; 1226 BP.

XX

AC AAZ93894;

XX

DT 25-SEP-2000 (first entry)

XX

DE Human EP-1 prostaglandin receptor coding sequence.

XX

KW Prostaglandin; receptor; pulmonary system; glaucoma;

KW identification; allele; polymorphism; detection; prostanoid; FP;

KW IP; DP; EP; TP; human; ds.

XX

OS Homo sapiens.

XX

FH Key Location/Qualifiers

FT CDS 1..1209

FT /*tag= a

FT /product= EP-1 prostaglandin receptor

FT allele replace (264,Y)

FT /*tag= b

FT allele replace (767,R)

FT /*tag= c

FT allele replace (816,Y)

FT /*tag= d

FT allele replace (999,R)

FT /*tag= e

XX

PN WO200029614-A1.

XX
 PD 25-MAY-2000.
 XX
 PF 12-NOV-1998; 98WO-IB01803.
 XX
 PR 12-NOV-1998; 98WO-IB01803.
 XX
 PA (EURO-) EURONA MEDICAL AB.
 XX
 PI Jonsson L, Lindstroem HR;
 XX
 DR WPI; 2000-387820/33.
 DR P-PSDB; AAY83411.
 XX
 PT Assessing prostanoid response status in an individual suffering from
 PT prostaglandin associated diseases such as pulmonary hypertension,
 PT glaucoma or arteriosclerosis, comprises comparing polymorphic patterns
 XX
 PS Claim 20; Fig 2; 57pp; English.
 XX
 CC The prostaglandin receptor family encompasses at least five classes
 CC of receptors designated FP, EP, IP, DP and TP receptors which are
 CC classified based on their sensitivity to the five primary prostanoids
 CC (F2alpha, E_2, I_2, D_2 and TXA_2). EP receptors further comprise
 CC four subtypes, designated EP1-4, which differ in their responses to
 CC various agonists and antagonists. The receptors have also shown a
 CC degree of cross reactivity. They may derive from a common ancestral
 CC gene. All of the receptors may exist as allelic variants and these
 CC polymorphisms may have an affect on a patients reaction to
 CC prostanoids. Detection of these polymorphisms may identify patients
 CC at risk from toxic or abnormal responses to prostanoid treatment.
 CC The prostaglandins play a role in the pulmonary system and in
 CC glaucoma.
 XX
 SQ Sequence 1226 BP; 111 A; 475 C; 430 G; 210 T; 0 other;

Query Match 24.2%; Score 949.2; DB 21; Length 1226;
 Best Local Similarity 97.2%; Pred. No. 1.9e-152;
 Matches 966; Conservative 0; Mismatches 28; Indels 0; Gaps 0;

Qy 2072 atgagcccttgcgggccctcaacctgagcctggcgggcgaggcgaccacatgcgcgggcg 2131
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 Db 1 atgagcccttgcgggccctcaacctgagcctggcgggcgaggcgaccacatgcgcgggcg 60

 Qy 2132 ccctgggtccccaacacgtcgggccgtgccgccgtcgggcgcttcgcccgcgctgcccatc 2191
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 Db 61 ccctgggtccccaacacgtcgggccgtgccgccgtcgggcgcttcgcccgcgctgcccatc 120

 Qy 2192 ttctccatgacgctggggcgccgtgtccaacctgctggcgctggcgctgctggcgagggcc 2251
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 Db 121 ttctccatgacgctggggcgccgtgtccaacctgctggcgctggcgctgctggcgagggcc 180

 Qy 2252 gcggggccgcctgcgacgccgccgctcgggccaccaccttctgctgttcgtggccagcctg 2311
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 Db 181 gcggggccgcctgcgacgccgccgctcgggccaccaccttctgctgttcgtggccagcctg 240

```

Qy 2312 ctggccaccgacctggcgggccacgtgatccccgggcgcgctggtgctgcgtctgtacact 2371
      |||
Db 241 ctggccaccgacctggcgggccacgtgatccccgggcgcgctggtgctgcgtctgtacact 300

Qy 2372 gcgggggcgcgctccggccggcggggcctgccacttccctgggcggctgcatggtcttcttc 2431
      |||
Db 301 gcgggggcgcgctccggccggcggggcctgccacttccctgggcggctgcatggtcttcttc 360

Qy 2432 ggcctgtgcccgctgctgctgggctgtggcatggccgtggagcgctgcgtgggcgtcacg 2491
      |||
Db 361 ggcctgtgcccgctgctgctgggctgtggcatggccgtggagcgctgcgtgggcgtcacg 420

Qy 2492 cggccgctgctccacgccgcgcgggtctcggtcgcccgcgcgccctggcgctggccgcg 2551
      |||
Db 421 cggccgctgctccacgccgcgcgggtctcggtcgcccgcgcgccctggcgctggccgcg 480

Qy 2552 gtggccgcggtggccttggccgtggcgctgctgccgctggcgcgctgggcccgtatgag 2611
      |||
Db 481 gtggccgcggtggccttggccgtggcgctgctgccgctggcgcgctgggcccgtatgag 540

Qy 2612 ctgcagtaccgggcacgtggtgcttcatcggcctgggtccccgggcggctggcgccag 2671
      |||
Db 541 ctgcagtaccgggcacgtggtgcttcatcggcctgggtccccgggcggctggcgccag 600

Qy 2672 gcactgcttgctggcctcttcgccagcctcggcctggtcgcgctcctcgccgcgctggtg 2731
      |||
Db 601 gcactgcttgctggcctcttcgccagcctcggcctggtcgcgctcctcgccgcgctggtg 660

Qy 2732 tgcaacacgctcagcggcctggccctgctacgcgcccgtggcgacgccgctcccgacgg 2791
      |||
Db 661 tgcaacacgctcagcggcctggccctgctacgcgcccgtggcgacgccgctcccgacgg 720

Qy 2792 cctcccccggcctcaggccccgacagccggcgtcgctggggggcgcaaggaccccgctcg 2851
      |||
Db 721 cctcccccggcctcaggccccgacagccggcgtcgctggggggcgcaaggaccccgctcg 780

Qy 2852 gcctccgcctcgctccgcctcgctccatcgcttcggcctccaccttctttggcggtctcgg 2911
      |||
Db 781 gcctccgcctcgctccgcctcgctccatcgcttcggcgtccaccttctttggcggtctcgg 840

Qy 2912 agcagcggtcggcacgcagagctcgcgcccacgacgtggagatggtgggccagcttgtc 2971
      |||
Db 841 agcagcggtcggcacgcagagctcgcgcccacgacgtggagatggtgggccagcttgtc 900

Qy 2972 ggtatcatggtggtgtcgtgcatctgctggagcccaatgctggtgaggggcgcaccggcc 3031
      |||
Db 901 ggtatcatggtggtgtcgtgcatctgctggagcccaatgctggtggtggtggcgctggcc 960

Qy 3032 cctcgagccacgctccttcccgtccctctcggc 3065
      |||
Db 961 gtcggcggtggagctctacctccctgcagcggc 994

```

RESULT 8

ABI98018

ID ABI98018 standard; cDNA; 1209 BP.

XX

AC ABI98018;
 XX
 DT 18-FEB-2002 (first entry)
 XX
 DE Non-endogenous human GPCR cDNA, SEQ ID NO: 556.
 XX
 KW Human; G protein-coupled receptor; GPCR; non-endogenous; mutant;
 KW constitutively activated GPCR; agonist; disease; ss.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 PN WO200177172-A2.
 XX
 PD 18-OCT-2001.
 XX
 PF 05-APR-2001; 2001WO-US11098.
 XX
 PR 07-APR-2000; 2000US-195747P.
 XX
 PA (AREN-) ARENA PHARM INC.
 XX
 PI Lehmann-Bruinsma K, Liaw CW, Lin I;
 XX
 DR WPI; 2001-648759/74.
 DR P-PSDB; ABB56382.
 XX
 PT Identifying agonists of G protein-coupled receptors (GPCRs) for use in
 PT disease treatment, comprises contacting candidate compounds with
 PT versions of GPCRs -
 XX
 PS Example 2; Page 358; 394pp; English.
 XX
 CC The invention relates to G protein-coupled receptors (GPCRs) for which
 CC the endogenous ligand has been identified. Non-endogenous
 CC constitutively activated versions of known GPCRs are used in the
 CC invention for the direct identification of candidate compounds as
 CC receptor agonists, inverse agonists or partial agonists. Such
 CC agonists are useful as therapeutic agents for diseases or disorders
 CC associated with GPCRs. The present sequence encodes a non-endogenous
 CC version of a known human GPCR.
 XX
 SQ Sequence 1209 BP; 107 A; 469 C; 424 G; 209 T; 0 other;

Query Match 24.1%; Score 944.4; DB 23; Length 1209;
 Best Local Similarity 96.9%; Pred. No. 1.2e-151;
 Matches 963; Conservative 0; Mismatches 31; Indels 0; Gaps 0;

Qy 2072 atgagcccttgcgggccctcaacctgagcctggcgggcgaggcgaccacatgcgcggcg 2131
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 Db 1 atgagcccttgcgggccctcaacctgagcctggcgggcgaggcgaccacatgcgcggcg 60

 Qy 2132 ccctgggtccccaacacgtcgggccgtgccgccgtcgggcgcttcgcccgcgtgcccatc 2191
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 Db 61 ccctgggtccccaacacgtcgggccgtgccgccgtcgggcgcttcgcccgcgtgcccatc 120

Qy 2192 ttctccatgacgctggcgccgtgtccaacctgctggcgctggcgctgctggcgaggcc 2251
 |||
 Db 121 ttctccatgacgctggcgccgtgtccaacctgctggcgctggcgctgctggcgaggcc 180

Qy 2252 gcggggcgctgagcgccgctcgccgccaccttctgctgttcgtggccagcctg 2311
 |||
 Db 181 gcggggcgctgagcgccgctcgccgccaccttctgctgttcgtggccagcctg 240

Qy 2312 ctggccaccgacctggcgggccacgtgatcccgggcgcgctgggtgctgctgtact 2371
 |||
 Db 241 ctggccaccgacctggcgggccacgtgatcccgggcgcgctgggtgctgctgtact 300

Qy 2372 gcggggcgcgctccggccggcgggcctgccacttctggcgggctgcatggtcttcttc 2431
 |||
 Db 301 gcggggcgcgctccggccggcgggcctgccacttctggcgggctgcatggtcttcttc 360

Qy 2432 ggcctgtgccgctgctgctgggctgtggcatggcctggagcgctgctggcgctcacg 2491
 |||
 Db 361 ggcctgtgccgctgctgctgggctgtggcatggcctggagcgctgctggcgctcacg 420

Qy 2492 cggccgctgctccacgcgcgggtctcggtcgcccgcgcgcgctggcgctggcgcg 2551
 |||
 Db 421 cggccgctgctccacgcgcgggtctcggtcgcccgcgcgcgctggcgctggcgcg 480

Qy 2552 gtggccgcggtggccttggcctggcgctgctgccgctggcgcgcgctggcgcgctatgag 2611
 |||
 Db 481 gtggccgcggtggccttggcctggcgctgctgccgctggcgcgcgctggcgcgctatgag 540

Qy 2612 ctgcagtaccgggacgtggtgcttcacggcctgggtccccggcgcgctggcgccag 2671
 |||
 Db 541 ctgcagtaccgggacgtggtgcttcacggcctgggtccccggcgcgctggcgccag 600

Qy 2672 gcaactgcttgcctccttcgccagcctcggcctggcgctcctcgccgctggtg 2731
 |||
 Db 601 gcaactgcttgcctccttcgccagcctcggcctggcgctcctcgccgctggtg 660

Qy 2732 tgcaacacgctcagcgccctggcctgctacgcgccgctggcgacggcctcccgacgg 2791
 |||
 Db 661 tgcaacacgctcagcgccctggcctgctacgcgccgctggcgacggcctcccgacgg 720

Qy 2792 cctccccggcctcaggccccgacagccggcgctcgctggggggcgacggaccccgctcg 2851
 |||
 Db 721 cctccccggcctcaggccccgacagccggcgctcgctggggggcgacggaccccgctcg 780

Qy 2852 gcctccgctcgctccgctcgctccatcgcttcggcctccaccttctttggcggtctcg 2911
 |||
 Db 781 gcctccgctcgctccgctcgctccatcgcttcggcctccaccttctttggcggtctcg 840

Qy 2912 agcagcggtcgccacgcagagctcgcgcccacgacgtggagatggtgggacagcttgc 2971
 |||
 Db 841 agcagcggtcgccacgcagagctcgcgcccacgacgtggagatgaagggcagcttgc 900

Qy 2972 ggtatcatggtggtgctgctgcatctgctggagcccaatgctggtgagggcgacggcc 3031
 |||
 Db 901 ggtatcatggtggtgctgctgcatctgctggagcccaatgctggtggtggcgctggcc 960

Qy 3032 cctcgagccacgctccttccgctccctctcgcc 3065

Db 961 gtcggcggctggagctctacctccctgcagcggc 994

US Pat

RESULT 1
US-08-068-729-3
; Sequence 3, Application US/08068729
; Patent No. 5985597
; GENERAL INFORMATION:
; APPLICANT: Ford-Hutchinson, Anthony
; APPLICANT: Funk, Colin
; APPLICANT: Grygorczyk, Richard
; APPLICANT: Metters, Kathleen
; TITLE OF INVENTION: DNA Encoding Prostaglandin Receptor EP1
; NUMBER OF SEQUENCES: 6
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: JOHN W. WALLEN III
; STREET: P.O. BOX 2000, 126 E. LINCOLN AVE.
; CITY: RAHWAY
; STATE: NEW JERSEY
; COUNTRY: USA
; ZIP: 07065
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/068,729
; FILING DATE: 26-MAY-1993
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: WALLEN, JOHN W III
; REGISTRATION NUMBER: 35,403
; REFERENCE/DOCKET NUMBER: 19012
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (908) 594-3905
; TELEFAX: (908) 594-4720
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1394 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
US-08-068-729-3

Query Match 24.7%; Score 967; DB 2; Length 1394;
Best Local Similarity 97.0%; Pred. No. 4.3e-171;
Matches 985; Conservative 0; Mismatches 30; Indels 0; Gaps 0;

Qy 2051 ccagcaccctggcgccctgacatgagcccttgccgggccctcaacctgagcctggcgggc 2110
|| ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 54 CCGGCACCCCTGGCGCCTGACATGAGCCCTTGCGGGCCCTCAACCTGAGCCTGGCGGGC 113

Qy 2111 gaggcgaccacatgcgcgggcgccctgggtccccaacacgtcgccgtgccgccgtcgggc 2170
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Db 114 GAGGCGACCACATGCGCGGGCGCCCTGGGTCCCCAACACGTCGGCCGTGCCGCCGTGGGGC 173

Qy 2171 gcttcgccccgcgtgcccattcttccatgacgctggcgccgtgtccaacctgctggcg 2230

Db	174	GCTTCGCCCCGCGCTGCCATCTTCTCCATGACGCTGGGCGCCGTGTCCAACCTGCTGGCG	233
Qy	2231	ctggcgctgctggcgagggcgggcgccgctgagcgccgctcgggcgccaccttc	2290
Db	234	CTGGCGCTGCTGGCGCAGGCCGCGGGCCGCTGCGACGCCGCGCTCGGCCACCACCTTC	293
Qy	2291	ctgctgttcgtggccagcctgctggccaccgacctggcgggccacgtgatcccgggcg	2350
Db	294	CTGCTGTTCTGTTGCCAGCCTGCTGGCCACCGACCTGGCGGGCCACGTGATCCCGGGCGCG	353
Qy	2351	ctggtgctgctgtgtactgctggggcgcgctccggcgggcgggcgctgccacttcctg	2410
Db	354	CTGGTGCTGCGTCTGTACTGCGGGGCGCGCTCCGGCCGGCGGGGCTGCCACTTCCTG	413
Qy	2411	ggcggtgcatggtcttcttcggcctgtgcccgtgctgctgggctgtggcatggccgtg	2470
Db	414	GGCGGCTGCATGGTCTTCTTCGGCCTGTGCCCCTGCTGCTGGGCTGTGGCATGGCCGTG	473
Qy	2471	gagcgctgctggcggtcacgcggccgctgctccacgcgcgcgggtctcggtcgccgc	2530
Db	474	GAGCGCTGCGTGGGCGTCACGCGGCCGCTGCTCCACGCCGCGCGGGTCTCGGTGCCCCG	533
Qy	2531	gcgcgcctggcgctggcgcggtggccgcggtggccttggccgtggcgctgctgcgcgtg	2590
Db	534	GCGCGCTGGCGCTGGCCGCGGTGGCCGCGGTGGCCTTGGCCGTGGCGCTGCTGCCGCTG	593
Qy	2591	gcgcgcgtggcgcgctatgagctgcagtaccggggcacgtggtgcttcacggcctgggt	2650
Db	594	GCGCGCTGGGCGCTATGAGCTGCAGTACCCGGGCACGTGGTGCTTCATCGGCCTGGGT	653
Qy	2651	ccccggggcggtggcgccaggcactgcttgcctcttcgccagcctcggcctggtc	2710
Db	654	CCCCGGGCGGCTGGCGCCAGGCACTGCTTGCTGGCCTCTTCGCCAGCCTCGGCCTGGTC	713
Qy	2711	gcgctcctcgccgcgctggtgtgcaacagctcagcgccctggccctgctacgcgcgcgc	2770
Db	714	GCGCTCCTCGCCGCGCTGGTGTGCAACACGCTCAGCGGCCTGGCCCTGCATCGCGCCCG	773
Qy	2771	tggcgacgcgctcccgacggcctccccggcctcaggccccgacagccggcgctcgctgg	2830
Db	774	TGGCGACGCCGCTCCCGACGGCTCCCCGGCCTCAGGCCCCGACAGCCGGCGTCGCTGG	833
Qy	2831	ggggcgacggacccccgctcggcctccgcctcgccctcgccatcgcttcggcctcc	2890
Db	834	GGGGCGCACGGACCCGCTCGGCCTCCGCCTCGTCCGCTCGTCCATCGCTTCGGCCTCC	893
Qy	2891	accttcttttggcggtctctcgagcagcggtcggcacgcagagctcgcgccccacgagtg	2950
Db	894	ACCTTCTTTGGCGGCTCTCGGAGCAGCGGCTCGGCACGCAGAGCTCGCGCCACGACGTG	953
Qy	2951	gagatggtgggacagcttgcggtatcatggtggtgctgcatctgctggagcccaatg	3010
Db	954	GAGATGGTGGGCCAGCTTGTCGGTATCATGGTGGTGTCTGCATCTGCTGGAGCCCAATG	1013
Qy	3011	ctggtgagggggcgacccggccctcgagccacgctccttcccgctccctctcggc	3065

Db 1014 CTGGTGTGGTGGCGCTGGCCGTCGGCGGCTGGAGCTCTACCTCCCTGCAGCGGC 1068

RESULT 2

US-09-255-671-3

; Sequence 3, Application US/09255671

; Patent No. 6031079

; GENERAL INFORMATION:

; APPLICANT: Ford-Hutchinson, Anthony

; APPLICANT: Funk, Colin

; APPLICANT: Grygorczyk, Richard

; APPLICANT: Metters, Kathleen

; TITLE OF INVENTION: DNA Encoding Prostaglandin Receptor EP1

; NUMBER OF SEQUENCES: 6

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: JOHN W. WALLEN III

; STREET: P.O. BOX 2000, 126 E. LINCOLN AVE.

; CITY: RAHWAY

; STATE: NEW JERSEY

; COUNTRY: USA

; ZIP: 07065

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.25

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/255,671

; FILING DATE:

; CLASSIFICATION:

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/068,729

; FILING DATE: 26-MAY-1993

; ATTORNEY/AGENT INFORMATION:

; NAME: WALLEN, JOHN W III

; REGISTRATION NUMBER: 35,403

; REFERENCE/DOCKET NUMBER: 19012

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (908) 594-3905

; TELEFAX: (908) 594-4720

; INFORMATION FOR SEQ ID NO: 3:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 1394 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: single

; TOPOLOGY: linear

; MOLECULE TYPE: cDNA

US-09-255-671-3

Query Match 24.7%; Score 967; DB 3; Length 1394;

Best Local Similarity 97.0%; Pred. No. 4.3e-171;

Matches 985; Conservative 0; Mismatches 30; Indels 0; Gaps 0;

Qy 2051 ccagcaccctggcgccctgacatgagcccttgccgggccctcaacctgagcctggcgggc 2110

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Db 54 CCGGCACCCCTGGCGCCTGACATGAGCCCTTGCGGGCCCCCTCAACCTGAGCCTGGCGGGC 113

Qy 2111 gaggcgaccacatgcgcgccgctgggtccccaacacgtcgcccggtgccgcccgtcgggc 2170
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 Db 114 GAGGCGACCACATGCGCGGCGCCCTGGGTCCCCAACACGTCGGCCGTGCCGCCGTGCGGC 173

Qy 2171 gcttcgcccgcgctgcccattcttctccatgacgctggcgccggtgtccaacctgctggcg 2230
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 Db 174 GCTTCGCCCCGCGCTGCCCATCTTCTCCATGACGCTGGGCGCCGTGTCCAACCTGCTGGCG 233

Qy 2231 ctggcgctgctggcgagggcgccggcgccgctgcgacgcgcgcgctcgcccgccaccttc 2290
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 Db 234 CTGGCGCTGCTGGCGCAGGCCGCGGGCCGCTGCGACGCCGCCGCTCGGCCACACCTTC 293

Qy 2291 ctgctgttcgtggccagcctgctggccaccgacctggcgggccacgtgatcccgggcgcg 2350
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 Db 294 CTGCTGTTCTGTGGCCAGCCTGCTGGCCACCGACCTGGCGGGCCACGTGATCCCGGGCGCG 353

Qy 2351 ctggtgctgctgtgtacactgcgggcgcgctccggccggcggggctgccacttcctg 2410
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 Db 354 CTGGTGCTGCGTCTGTACACTGCGGGGCGCGCTCCGGCCGGCGGGGCTGCCACTTCCTG 413

Qy 2411 ggcggtgcatggtcttcttcggcctgtgcccgtgctgctgggctgtggcatggccgtg 2470
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 Db 414 GCGGGCTGCATGGTCTTCTTCGGCCTGTGCCCGCTGCTGCTGGGCTGTGGCATGGCCGTG 473

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 Db 474 GAGCGCTGCGTGGGCGTCACGCGGCCGCTGCTCCACGCCGCGGGTCTCGGTGCCCCGC 533

Qy 2531 gcgcgcctggcgctggccgcgggtggccgcgggtggccttggccgtggcgctgctgcgcgtg 2590
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Qy 2591 gcgcgcgtgggcccgtatgagctgcagtaccggggcacgtggtgcttcacggcctgggt 2650
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 Db 594 GCGCGCTGGGCCGCTATGAGCTGCAGTACCGGGCACGTGGTGCTTCATCGGCCTGGGT 653

Qy 2651 ccccgggggcggtggcgccaggcactgcttgcctcttcgccagcctcggcctggtc 2710
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 Db 654 CCCCCGGGCGGCTGGCGCCAGGCACTGCTTGCTGGCCTCTTCGCCAGCCTCGGCCTGGTC 713

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 Db 714 GCGCTCCTCGCCGCGCTGGTGTGCAACACGCTCAGCGCCTGGCCCTGCATCGGCCCCGC 773

Qy 2771 tggcgacgcgctcccgacggcctccccggcctcaggccccgacagccggcgctcgctgg 2830
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 Db 774 TGGCGACGCCGCTCCCGACGGCCTCCCCGGCCTCAGGCCCCGACAGCCGGCGTCGCTGG 833

Qy 2831 ggggcgcacggaccccgctcggcctcgccctcgctccgctcgctccatcgcttcggcctcc 2890
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 Db 834 GGGGCGCACGGACCCCGCTCGGCCTCCGCCTCGTCCGCCTCGTCCATCGCTTCGGCCTCC 893

Qy 2891 accttctttggcggtctcggagcagcggtcggcacgcagagctcgcgccacgacgtg 2950
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 Db 894 ACCTTCTTTGGCGGCTCTCGGAGCAGCGGCTCGGCACGCAGAGCTCGGCCCCACGACGTG 953

Qy 2951 gagatggtgggccagcttgtcggtatcatggtggtggtcgatctgctggagcccaatg 3010
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Db 954 GAGATGGTGGGCCAGCTTGTCTGGTATCATGGTGGTGTCTGTCATCTGCTGGAGCCCAATG 1013

Qy 3011 ctggtgagggggcgaccggcccctcgagccacgctccttcccgctccctctcggc 3065
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Db 1014 CTGGTGTGTTGGTGGCGCTGGCCGTCGGCGGCTGGAGCTCTACCTCCCTGCAGCGGC 1068